

Pythagorean Triple

for solo guitar

by

Michael Wittgraf

for Jesse Langen

Notes for Pythagorean Triple

Pythagorean Triple employs a mathematical system of music manipulation that I developed in 1995. It is more controlled by the system than any previous work, but it is also less complex and more consonant. I used mostly 3, 4, and 5-note chords that are both related to each other and derived from the twelve-note row composed of consecutive major and minor triads. The numbers 3, 4, and 5 satisfy the equation “a squared plus b squared equals c squared”. Any set of three whole numbers that satisfies that equation is called a “Pythagorean triple”. Pythagorean Triple was written in 1997 for Jesse Langen.

Pythagorean Triple

for solo guitar

Duration: Approx. 5 min.

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Sustained (♩=160)

musical notation for the Sustained section (measures 1-4). The tempo is marked as ♩=160. The music is in D major (two sharps) and 8/8 time. It features a series of chords and single notes with dynamic markings of *sffz* and *pont.*. Annotations include "Damp D# and G#" pointing to specific notes in measures 2 and 3.

Expressively, but in strict rhythm (♩=64)

musical notation for the Expressively section (measures 5-8). The tempo is marked as ♩=64. The music is in D major and 8/8 time. It features a melodic line with dynamic markings of *pp*, *mf*, and *pont.*. Annotations include "Damp D# and G#" and "ord." with circled numbers 3 and 5.

Alternate rhythmic notation

Alternate rhythmic notation and musical notation for measures 9-12. The alternate notation shows two examples of a 3-measure phrase in 5/4 and 4/4 time. The musical notation for measures 9-12 includes dynamic markings of *pp*, *mf*, and *f*, along with *ord.* and *pont.* annotations. Circled numbers 2, 3, 4, and 6 are present.

Broadly (♩=56)

Expressively, but in strict rhythm (♩=64)

5/4

31 *ff* *harm.* *mf* XII *ff* *p* **Sustained** ($\text{♩}=160$) *pont.* *sffz*

34

sffz *sffz* *sffz* Damp D# and G# Damp D# and G#

38

sffz *pp* **Expressively, but in strict rhythm** ($\text{♩}=64$) Damp D# and G#

41

mf *pp*

45

f

48

harm. (1)
harm. (5)
mp
f (3)
p (2)

51

mp (1)
f (3)
f (4)
f (4)
f (5)
γ (2)

54

sub. p (2)
f ord. (3)
p ord. (4)
pont. (4)
f (5)
f (5)
sfz

57

p ord. (3)
mf (6)
pont. (6)
cresc.
ord. (6)
molto espr. (5)
ord. (4)

59

60 *f*

61 *ff* ③

Slightly Faster, Determined (♩=84)

62 *f* *pont.*

63 *pp* *tasto*

64 *ff* *pont.*

65 *pp* *tasto*

66 *ff* *pont.*

67 *f* *tamb.*

68 *sfz* *pont.* *tamb.* *Rasg.*